



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/399,288	09/17/1999	JARI JUOPPERI	297-008889-U	2110
7590 03/07/2005 CLARENCE A GREEN PERMAN & GREEN 425 POST ROAD FAIRFELD, CT 06430			EXAMINER ZIA, SYED	
			ART UNIT 2131	PAPER NUMBER

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/399,288.	JUOPPERI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Syed Zia	2131	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 September 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 3-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7 and 9-15 is/are allowed.
- 6) ☐ Claim(s) 3-5 is/are rejected.
- 7) ☐ Claim(s) 6 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                             | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

This office action is in response to amendment filed on September 17, 2004. Original application contained Claims 1-15. Applicant previously cancelled Claims 1-2. Applicant previously amended claims 3-15. Applicant currently amended Claims 3, and 8. Applicant amendments filed on September 17, 2004 have been entered and made of record, and previous claim objections regarding Claims 3, and 8 have been withdrawn. Therefore, presently pending claims are 3-15.

### ***Allowable Subject Matter***

5. Claims 6, and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. Claims 7 and 9-15 are allowable over the prior art of record.

### ***Response to Arguments***

3. Applicant's arguments filed September 14, 2004 have been fully considered but they are not persuasive because of the following reasons:

Art Unit: 2131

Regarding Claims 3-5 applicants argued that in the cited prior art (CPA) [Chang et al. (0-7803-3692, IEEE 5/96)] (hereinafter 'Chang'), the initial part of the authentication protocol means the procedure in which the portable unit (entity) authenticates with the VSD and sets up a session key. A temporary identity is also assigned to the entity. By basic protocol it is meant the procedure in which an efficient protocol is provoked (page .254, Col. 1, last paragraph). *This is not the same as continuing the authentication procedure when the call is established, or during the call, as is claimed by Applicant. Thus, Chang 1 does not anticipate Applicant's invention*".

This is not found persuasive. The system of Chang et al. clearly teaches and describes a system and method of end-to-end authentication protocol for devices communicating with each other in mobile network. Whenever a mobile device makes a call when mobile device roams into voice service domain, the authentication process is initiated and *challenge* of caller is forwarded to *called party* (end user) after VSD authentication. This end-to-end continuing authentication is explicitly described in Table 5 and 6 of prior art disclosure (page 1254 2<sup>nd</sup> column, and page 1255 2<sup>nd</sup> column last paragraph).

Therefore, the system of cited prior art describes and provides system and method to authenticate mobile devices by user-to-user data exchange in a mobile network.

Applicants clearly have failed to explicitly identify specific claim limitations, which would define a patentable distinction over prior arts. The examiner is not trying to interpret the invention but is merely trying to interpret the claim language in its broadest and reasonable meaning. The examiner will not interpret to read narrowly the claim language to read exactly from the specification, but will interpret the claim language in the broadest reasonable

Art Unit: 2131

interpretation in view of the specification. Therefore, the examiner asserts that the system of cited prior arts does teach or suggest the subject matter broadly recited in independent Claim 3 and in subsequent dependent Claims. Accordingly, rejections for claims 3-5 are respectfully maintained.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Chang et al. (0-7803-3692, IEEE 5/96, hereinafter 'Chang').

As per claim 3, Chan teaches the claimed method to authenticate a mobile station in a mobile network comprising: authenticating the mobile station with user-to-user data exchange; and exchanging the data during a call set-up or during a call (page 1254, column 2, last paragraph).

As per claims 4 and 5, Chang also teaches that an encryption key is agreed between the mobile stations and that the mobile stations execute a mutual authentication and key agreement protocol based on public-key cryptography (page 1252, Section 1).

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Syed Zia whose telephone number is 571-272-3798. The examiner can normally be reached on 9:00 to 5:00.

Art Unit: 2131

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Andrew Caldwell", with a stylized flourish at the end.

SZ  
March 03, 2005

**ANDREW CALDWELL**  
**SUPERVISORY PATENT EXAMINER**